

Claims

- [c1] A coating composition comprising
a film-forming polymer comprising an epoxide polymer having an equivalent weight between 170 and 900,
a mixture of crosslinking agents wherein at least one crosslinking agent is a polyamide functional compound and at least one crosslinking agent is a phenalkamine compound, and
one or more pigments.
- [c2] A coating composition according to claim 1, wherein the epoxide polymer comprises an epoxy-terminated polyglycidyl ether of bisphenol A.
- [c3] A coating composition according to claim 1 wherein the crosslinking agents comprise a mixture of phenalkamine compound and polyamide functional compound where phenalkamine compound is present in an amount between 98% and 2% by weight and the polyamide functional compound is present in an amount between 2% and 98% by weight based on total crosslinker weight.
- [c4] A coating composition according to claim 1, wherein the crosslinking agents comprise a mixture of phenalkamine compound and polyamide functional compound where phenalkamine compound is present in an amount between 40 and 98% by weight and the polyamide functional compound is present in an amount between 2% and 60% by weight based on total crosslinker weight.
- [c5] A coating composition according to claim 1, wherein the crosslinking agents comprise a mixture of phenalkamine compound and polyamide functional compound where phenalkamine compound is present in an amount between 50 % and 98% by weight and the polyamide functional compound is present in an amount between 2% and 50% by weight based on total crosslinker weight.
- [c6] A coating composition according to claim 1 wherein the crosslinking agents comprise a mixture of phenalkamine compound and polyamide functional compound where phenalkamine compound is present in an amount between 60 and 40% by weight and the polyamide functional compound is present in an amount between 40% and 60% by weight based on total crosslinker weight.

- [c7] A coating composition according to claim 1 wherein the pigment is selected from the group consisting of metal oxide pigments, titanium dioxide, talcum, calcium carbonate, calcium metasilicate, calcium phosphate, calcium molybdate, calcium metaborate, barium sulfate, barium metaborate, zinc phosphate, zinc chromate, zinc nitrophthalate, zinc molybdate, zinc benzoate, aluminum zinc phosphate and aluminum triphosphate and mixtures thereof.
- [c8] A coating composition according to claim 1 wherein the pigment is selected from the group consisting of zinc oxide pigments, titanium dioxide, iron oxide, talcum, calcium carbonate, calcium metasilicate, barium sulfate, zinc phosphate, zinc chromate, calcium phosphate, barium metaborate and mixtures thereof.
- [c9] A coating composition according to claim 11 wherein the phenalkamine compound is present in an amount between 40% and 98% by weight and the polyamide compound is present in an amount between 60% and 2% by weight, where weight is based on total crosslinker weight.
- [c10] A coating composition according to claim 1 wherein the pigment is present in an amount between 32 and 52 % by weight, based on total solids weight of the coating composition.
- [c11] A coating composition according to claim 1 wherein the coating is cured at ambient temperature.
- [c12] A coating composition according to claim 1, wherein the coating comprises a primer coating for automotive refinish applications.
- [c13] A method of forming a stable dispersion of pigment in a coating composition comprising combining
a film-forming polymer comprising an epoxide polymer having an equivalent weight between 170 and 900,
a mixture of crosslinking agents wherein at least one crosslinking agent is a polyamide functional compound and at least one crosslinking agent is a phenalkamine compound, and
one or more pigments.

- [c14] A method according to claim 13 wherein the epoxide polymer comprises an epoxy-terminated polyglycidyl ether of bisphenol A.
- [c15] A method according to claim 13, wherein the crosslinking agents comprise a mixture of phenalkamine compound and polyamide functional compound where phenalkamine compound is present in an amount between 98% and 2% by weight and the polyamide functional compound is present in an amount between 2% and 98% by weight based on total crosslinker weight.
- [c16] A method according to claim 13, wherein the crosslinking agents comprise a mixture of phenalkamine compound and polyamide functional compound where phenalkamine compound is present in an amount between 40 and 98% by weight and the polyamide functional compound is present in an amount between 2% and 60% by weight based on total crosslinker weight.
- [c17] A method according to claim 13, wherein the crosslinking agents comprising a mixture of phenalkamine compound and polyamide functional compound where phenalkamine compound is present in an amount between 50 % and 98% by weight and the polyamide functional compound is present in an amount between 2% and 50% by weight based on total crosslinker weight.
- [c18] A method according to claim 13, wherein the crosslinking agents comprise a mixture of phenalkamine compound and polyamide functional compound where phenalkamine compound is present in an amount between 60 and 40% by weight and the polyamide functional compound is present in an amount between 40% and 60% by weight based on total crosslinker weight.
- [c19] A method according to claim 13, wherein the pigment is selected from the group consisting of metal oxide pigments, titanium dioxide, talcum, calcium carbonate, calcium metasilicate, calcium phosphate, calcium molybdate, calcium metaborate, barium sulfate, barium metaborate, zinc phosphate, zinc chromate, zinc nitrophthalate, zinc molybdate, zinc benzoate, aluminum zinc phosphate and aluminum triphosphate and mixtures thereof.
- [c20] A method according to claim 13, wherein the pigment is selected from the group consisting of zinc oxide pigments, titanium dioxide, iron oxide, talcum,

calcium carbonate, calcium metasilicate, barium sulfate, zinc phosphate, zinc chromate, calcium phosphate, barium metaborate and mixtures thereof.

[c21] A method according to claim 19, wherein the phenalkamine compound is present in an amount between 40% and 98% by weight and the polyamide crosslinker is present in an amount between 60% and 2% by weight, based on total crosslinker weight.